

# ABSTRACT

Methods for detecting acetylcholinesterase in a brain of a patient, comprising administering to the patient a detectable amount of a radiolabeled compound of a class of benzisoxazoles or a pharmaceutically acceptable salt thereof, are disclosed herein. The methods are useful for diagnosing, estimating the severity of, or monitoring the progression of a dementia, such as Alzheimer's disease, in a patient. In a preferred embodiment, the benzisoxazole is:

